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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

CONTENTS

IMPACT OF POLISH ECONOMIC REFORM ON CEMA RELATIONS DISCUSSED

Warsaw HANDEL ZAGRANICZNY in Polish No 2, 1984 pp 14-18

[Article by Dariusz Ledworowski: "The CEMA Economic Mechanism and Economic Reform in Poland"]

[Text] The general view among economists today is that the continued increase in and improvement of cooperation within the framework of socialist integration essentially is conditioned by:
--the restructuring of the economic mechanism of this cooperation (whose basic solutions were developed in the 1950's and whose improvement process is proceeding rather slowly);
--the transformation of internal economic systems towards increasing the receptiveness of economic organizational units to efficiency and to incentives that emanate from the markets of integrating countries.

Although many economists identify with these general directions of proposed changes, their opinions differ with regard to specific diagnoses and proposals. Discussions assessing the cooperation mechanism that had taken shape took place at the end of the 1960's/beginning of the 1970's in all CEMA countries. Polish economists also participated actively in these discussions. Thus, it can be stated that we have at our disposal a broad understanding of the virtues and faults of this mechanism, as well as many proposals for changes that would eliminate these shortcomings. The crowning achievement of this discussion, adopted at the 25th CEMA Session in Bucharest in July 1971, was the "Comprehensive Program for the Continued Increase in and Improvement of the Cooperation and Development of the Socialist Economic Integration of CEMA Member Countries." Efforts to improve this mechanism lasted upwards of 2 years, and the "Comprehensive Program" was developed in the course of many discussions held within the framework of seven working groups in which the representatives of all the countries participated. While it is not my intention to outline the points of this program, I would like to look at its fundamental thesis that points out that "the increased coordination of trade and production does not lead in and of itself to the satisfactory development of integration. It must be based upon the broad utilization of economic levers, goods-monetary levers." Although the very indication of the role of these levers in the integration process does not predetermine that their structure and principles of operation will concur with the proposals and terms of the theory of the optimum allocation of resources, it should

be pointed out that the "Comprehensive Program" expresses a basically new approach defining the direction in which the restructuring of the mechanism ought to take place (e.g., with regard to the principles of operation of bilateral and multilateral agreements, the rate-of-exchange and clearing of accounts mechanisms and the like).

It is characteristic that the mechanism of the cooperation of CEMA countries, developed over many years, while not violating the separately developed principles of the cooperation of particular member-country economies, functioned under conditions of the high rate of concurrence of these principles. The discussion regarding the need to rebuild the mechanism of cooperation within the CEMA framework coincided temporally with the discussions conducted in particular countries over the internal reforms of economic mechanisms that moved towards the increased parametrization of steering national economies. These discussions led to changes in economic practice, inasmuch as changes were then made in many countries in the sphere of planning at the level of economic units and in the sphere of producer prices. Moreover, changes were made in the principles of enterprise and workforce incentives, and new standards of evaluation were introduced. The scope of these changes varied among CEMA countries, with the result that in many spheres, there was an increase in the differences between the ways the central economic authorities influenced the economy, including the sphere of economic ties with foreign countries.

It is certain that the varied degrees of the parametrization of internal economic systems work to limit the use of commodities-monetary mechanisms and levers within the CEMA framework. At the same time, this means that if all countries equalized the scope and methods of parametric influence upon the economy, while using the most advanced approach in this regard, the transformation of the CEMA economic mechanism would take place much more rapidly. In this light, the question frequently is raised whether it would not be more effective to influence the progress of these processes in particular countries by changing the joint mechanism or whether a change in this mechanism is largely determined by a change in the particular internal systems. In my estimation, this is not a dilemma that can be resolved in a single move, since both of these spheres have a mutual impact on one another and since the progress of the integration process--as I emphasized at the outset--depends upon both of them.

The undertaking of economic reform in Poland demands that we look at the mechanism of mutual cooperation of CEMA countries to determine the extent to which it fosters the goals set for the reform in the area of trade with foreign countries. It is characteristic that, in discussions on the reform, essentially there were no currents that proposed changing the economic mechanism within the CEMA framework or suggested that reform progress was contingent upon such changes. The discussion focused on issues of restructuring internal solutions, since they were the major factor that led to the economic crisis. Meanwhile, the developed forms of external cooperation were treated realistically as solutions to be adapted structurally, being external forms subject to change via multilateral agreements. Thus, this is a specific trait of the discussion on the economic reform, differing from the discussion from

the end of the 1970's, in which the issues of rebuilding the cooperation mechanism were also discussed.

It should be noted, however, that past relations and trade with CEMA countries, even after the adoption of the "Comprehensive Program," were adapted to the system of economic management in which a central plan is in effect that issues directives to economic units that impose upon them the duty to execute economic agreements and trade agreements concluded by the government or other elements of the central economic administration. Therefore, the dilemma arises: how can the high level of trade tasks directives for the production level be reconciled with the assumptions of the growing autonomy and self-financing of enterprises? How can the process of preparing and implementing trade agreements be streamlined in a situation where trade with CEMA countries represents more than half of Poland's trade with foreign countries, and for many enterprises represents an important part of their production and procurement?

It would seem that indicating some potential spheres of disruption in the operation of reform solutions in their pure form when confronted by the mechanism of cooperation with CEMA countries would enable us to assess the degree to which they are merely potential problems and the degree to which we can adapt to them successfully. The fundamental dilemma emanates from the present character of agreements and trade understandings made and confirmed at the central level and the primary principal of enterprise autonomy based on self-financing, emanating from cost effectiveness accounting carried out at the enterprise level. If some provisions of such contracts are out of line with the results of cost effectiveness accounting at the enterprise level, a conflict arises: either enterprise autonomy is violated or there arises the danger that interstate obligations that have been taken on will not be discharged. The danger of this kind of conflict, under the conditions of the use of pure reform solutions,i.e., without adaptative mechanisms, is the greater, the more detailed the agreements. Thus, in recent years, as the economic stability of CEMA countries has declined, we observe a tendency toward an increase in the detailed nature of agreements and the use of a growing area of trade contingencies in groups of goods. Likewise, the commodities list of so-called mutually tied-in deliveries is growing, which means the strict accounting of some important goods groups and the making contingent of deliveries within their framework to a given country upon the receipt of deliveries from that country based on prior agreement.

The principle of enterprise autonomy may also come into conflict with the rules of price-setting in effect within the CEMA framework and the principles adopted and used on the domestic market and in exchange with free-foreign-exchange countries. In price negotiations (conducted separately by representatives of the foreign trade apparatus without the participation of the representatives of industry), the prices for many assortments, despite the fact that the principle of creeping prices based on world prices has been adopted, frequently takes on a balance-sheet character. This means that these negotiations are conducted from the viewpoint of the need to balance out the entire agreement or its individual parts, leading to mutual concessions

and revisions that may be favorable on the scale of the given agreement, if unfavorable for the specific manufacturer. The domestic producer, given the choice of obtaining contractual prices on the domestic market or transaction prices in trade with free-foreign-exchange markets, would not always be interested in gearing his production towards implementing the provisions of trade agreements.

In the pricing sphere, the lack of concurrence of the interests of the central level and the production level with regard to trade with CEMA countries also may emanate from the adopted reform principle of basing the prices of raw and fabricated materials for production on free-foreign-exchange prices, regardless of the point of origin of the given raw material. Hence, for the domestic producer, the prices of these items relate the level of prices in effect on the free-foreign-eschange market with a year's delay at most, and not in consideration of the 5-year period, as is the case in CEMA price-setting. It can even be stated that the domestic consignee of raw materials imported from CEMA countries, with regard to basic raw materials for production, does not know the prices actually in effect for them in mutual trade. On the other hand, in totaling his production costs, he must take into account the costs of these raw materials according to assessments based on the free-foreign-exchange market. If, in turn, the goods that he produces are exported to the market of the raw materials supplier, it can happen that the high level of costs will not be accepted by the consignee, since the raw materials used for production may be cheaper in reality than they are on the free-foreign-exchange market. Even though the producer really has incurred these costs, this does not mean that the national economy has incurred them.

The manufacturer's interests likewise may conflict with the interests of the entire economy, due to the specific nature of the currency rate-of-exchange levers in effect in CEMA countries. Despite the fact that member nations have total freedom to set their own national currency rates-of-exchange with reference to a mutual currency, i.e., the transferable ruble, the parity of the transferable ruble compared to the dollar and other convertible currencies may lead to problems. Internal currency systems correct parity ratios of a mutual currency compared to the dollar, bringing them into the proper ratio with reference to domestic export to, and import from, the two payments areas. It must be noted, however, that some producers of highly processed goods with a fixed profit margin, having the option of purchasing such products on the free-foreign-exchange market, may suffer losses due to these currency rate-of-exchange ratios. This can emanate from the fact that the establishment of a domestic currency rate-of-exchange by comparison with the transferable ruble takes into account all trade. This means that lower raw materials prices on purchases imported from CEMA countries also influence the exchange rate of the zloty versus the ruble, while for the producer, this factor, that somewhat levels rate-of-exchange ratios, is neither critical nor comprehensible, since (as was noted previously) these are not the prices at which he calculates the costs of his production and export. He buys them at prices that emanate not from the ruble rate-of-exchange in effect, but at prices that emanate from the dollar rate-of-exchange.

There is also a certain danger that emanates from the authorizations to conduct foreign activity adopted in the reform. Here the possibility of a potential clash of powers arises from the different principles of conducting trade in some socialist countries. In accordance with the assumptions of the Polish reform, producers that fulfill specific conditions have the right to obtain concessions to conduct foreign trade autonomously. Undoubtedly,the crumbling of the foreign trade apparatus with regard to the previously existing structure and the existing structure in other countries, in spite of being a highly favorable and advisable process, may lead, for the previously noted reasons, to difficulties, at least in the initial phase. The coordinating role of the foreign trade minister under such conditions must also include concluding agreements and contracts with producers. Likewise, the reform principle of the freedom choice of a foreign trade unit by the domestic supplier or consignee doubtless introduces an added element of uncertainty regarding powers and may lead to certain complications from the viewpoint of guaranteeing the implementation of agreements.

The previously noted potential fields of the lack of concurrence of the interests of the autonomous and self-financing producer with the interests of the national economy expressed in a contract or trade agreement with CEMA countries emanates largely from the different principles of the cooperation mechanism within the CEMA framework and internal systems-type solutions. It should be noted, however, that the potential conflicts of these two mechanism either would not take place or would be of a limited nature if some important provisions of the "Comprehensive Program" were implemented, thereby making the changes in the cooperation mechanism envisaged by the program. For example, the program provided for the introduction and the gradual expansion of so-called nonquota (liberalized) trade, proposed by Polish economists long ago. In this area, the trade and production units of particular countries to take initiatives and make agreements autonomously, and their results would be balance comprehensively based on a common currency. Although in the 1970's, the scope of nonquota trade between socialist countries increased, this primarily affected goods in very short supply (chiefly raw materials); the trade of such items is coordinated at the central level and is reckoned in convertible currencies.

Essentially the "Comprehensive Program" did not settle the question of the principles of price-setting, putting this issue off for future resolution. This likewise was the case with the creeping price (averaged and refined) formula from the 5-year period. However, this principle is used primarily with regard to raw materials, while prices for processed and uncatalogued products are still based on costs and domestic prices.

On the currency issue, the "Comprehensive Program" declared the joint specification of the ratio of national currencies to the transferable ruble and the ratio of mutual national currencies, as well as the initiation of the process of arriving at the convertibility of the transferable ruble based on a real rate-of-exchange. The successful implementation of this principle would mean that the previously noted differences in interests at the levels of the producer and the national economy would not have to occur. In terms of the functions it would perform, money in trade with socialist

countries would be akin to free-foreign-exchange and could represent a real instrument of cost effectiveness accounting for the producer, supplying a real assessment of efficiency from the viewpoint of the national economy as a whole as well.

The "Comprehensive Program" was only very general in its declaration of the direct cooperation of economic organizational units, primarily in the sphere of specialized production and coproduction. It did not usher in any changes in the powers of the levels committed to the process of preparing and coordinating agreements and trade understandings. It may be assumed, however, that if real progress occurred in the area of so-called nonquota trade and in the currency sphere, many new economic organizational units would have to enter the phase of coordinating these agreements.

The previously noted potential areas of conflict between the work of the CEMA economic mechanism and the economic reform assumptions essentially did not arise perceptibly with the initiation of the implementation process. In fact, in this area, no new phenomena or difficulties have been noted compared with those in evidence before the reform was implemented. At the same time it is known that no new instruments for transfering agreements with socialist countries to economic units have been put into effect. Since the beginning of the operation of the reform, the duties emanating from contracts and agreements have been treated by economic units as directive tasks. The law on enterprises includes provisions binding enterprises to implement tasks emanating from international agreements. Bilateral agreements with socialist countries are fully assumed and implemented by enterprises on this basis. Although as envisaged, this provision of the law was not to serve as a screen for maintaining the former principles of assigning tasks concerning trade with socialist countries, essentially it does serve this purpose. At present, enterprises receive their tasks as before from their superior units, while the subbranch ministries, whose powers and authorizations were limited in other spheres, in the contractual sector under their jurisdiction continue to perform preparatory and coordinating functions. At the same time, the balancing of accounts put into practice in foreign trade at the beginning of the reform's operation neutralizes fully the shortcomings of the pricing and currency system, since its operation in essence amounts to honoring every level of costs borne by producers. In this situation, no difference really occurs between their cost effectiveness accounting and accounting at the macrolevel.

The previously noted preservation of the past principles of exerting influence on producers in the area of trade with CEMA countries and the resultant conclusion regarding the lack of conflict between some solutions of the mechanism of cooperation within the framework of this organization and the economic reform assumptions in Poland does not mean that this is the only way that economic organizational units can and should continue to honor their interstate obligations within the CEMA framework. Within the framework of discussion on the Polish economic reform (although many writers of the various reform drafts and variants failed to consider this), the importance of this issue was noted both in the work of Team III and in the Eighth Commission for Economic Reform Affairs and possible solutions were given.

Moreover, a relatively early draft of the reform assumptions (and an SGPiS [Main School of Planning and Statistics] draft that broadly encompassed the entire economy) included the recommendation that "orders occurring in cooperation with socialist countries" should be replaced by the principle that, before embarking upon negotiations with CEMA partners, central organs must coordinate matters--by contract--with domestic enterprises. Moreover, it would be desirable for enterprise representatives to take part in delegations negotiating international agreements. If the negotiations conducted by central organs result in worse terms than those established with enterprises, these organs would be able to guarantee the completion of the obligations incurred only by correspondingly compensating the enterprises out of the budget. On the other hand, they would not have the right to force them via production orders to make "deliveries under worse terms." Team III for Economic Systems Affairs also spoke out in favor of contracts with enterprises and the use of export licenses in trade with socialist countries as well.

Team VIII for Affairs of Cooperation With Foreign Countries treated this issue relatively the most extensively. In this team it was adopted that the coordination of the central foreign trade plan with enterprise plans in trade with socialist countries ought to be implemented through "contracts concluded by the MHZ [Ministry of Foreign Trade] with the suppliers of export goods, both concerning state orders and contracts concluded with consignees of imported goods, and concerning orders for imported goods." The team likewise contemplated the creation of a Chamber of Foreign Trade (or an Industrial-Trade Chamber) that would represent the interests of enterprises and their associations to the central and local authorities and other economic units. It would be a chamber of a self-governing nature that would be able to act as mediator between the MHZ and producers in the negotiation of contracts and government orders. The need was also pointed out for the central authorities to honor the profitability of export for enterprises and, consequently, to make use of the appropriate financial compensation if the implementation of contractual obligations works to the detriment of the enterprise.

Although these are merely the very general directions that ought to be taken by reform solutions in order to ensure the transfer to the producer level of state obligations with regard to cooperation with CEMA countries, they demonstrate conclusively that the potential differences in interests between producers and the central authorities can be resolved without resorting to the use of the traditional directives-type solutions. The consistent putting into practice of the economic reform, therefore, is not dependent upon the given form of the economic mechanism developed within the CEMA framework.

8536
CSO: 2600/1059

BRIEFS

AFTER-HOURS STREET CLEANERS--In more and more GDR cities, interested residents are hired for jobs which are actually the responsibility of the municipal service enterprises. Thus, GDR citizens, during their leisure hours and in exchange for little pay, are taking care of city parks in many places. The number of maintenance contracts concluded with such leisure-time gardeners has risen by leaps and bounds recently and is supposed to be further increased in large cities and new construction areas. In many cities, among them Karl-Marx-Stadt (Chemnitz), citizens even work as lantern lighters in their free time. Because central lighting of the old gas lanterns is impossible, local people have taken over this task. Recently there has been an increase in the use of street cleaners after hours, as for instance in Berlin and Rostock. In Erfurt, citizens have lately been urged to sign "street sweeping contracts" with the city. The leisure-time street cleaners are generally paid M4 per hour. The annual wage depends on how often sweeping services have been performed and on the "degree of difficulty." Under the most favorable conditions, a citizen of Erfurt who signs a street sweeping contract can add up to M 3,000 tax-free to his income. Personnel problems in the municipal enterprises are given as the reason for this major shift of certain municipal service tasks to the citizenry. The Erfurt sanitation department, for instance, stated that it could no longer cope with cleaning the areas for which it is responsible given the number of its personnel, To be sure, concluding maintenance, cleaning and other contracts with citizens should be cheaper for the municipal enterprises than hiring additional workers. In addition, the effects on the city's appearance are positive: Most after-hour helpers take their duties extremely seriously. [Text] [Bonn IWE TAGESDIENST in German No 88, 19 Jun 84 p 1]

RATIONALIZATION NOT FULLY EXPLOITED--Industrial enterprises of the GDR do not exploit the potential for saving manpower as a result of rationalization investments in many cases, according to a critical commentary in the East Berlin journal SOZIALISTISCHE ARBEITSWISSENSCHAFT [Socialist Labor Science]. Extensive investigations have shown that the manpower requirement after rationalization investments could be reduced by from 6 to 13 percent beyond the original plans of the enterprises. From this it can be seen that the rough methods used by combines and enterprises for determining their manpower needs when preparing investments no longer satisfy the need for the most effective use of manpower. New methods have to be found which would better serve this objective. [Text] [Bonn IWE TAGESDIENST in German No 88, 19 Jun 84 p 2]

CSO: 2300/543

EFFECTS OF NONAGRICULTURAL WORK ON TSZ'S WEIGHED

Budapest FIGYELO in Hungarian 7 Jun 84 pp 1, 4

[Article by Csaba Vertes: "Side by Side With the Competitors--TSz Ancillary Plants"]

[Text] Compared with 1982, last year there was no increase in the number of producer cooperatives which is the first time this happened in 5 years. Another phenomenon characteristic of last year is the fact that the increase in sales revenues resulting from auxiliary activities was less dynamic than before, and although today the services of our ancillary plants are still industrial in nature, in 1983 there was an unprecedented growth in their so-called auxiliary services (services to the population, water management, advertising, organization of fairs, etc.).

The Sales Revenue Picture

While earlier our agricultural producer cooperatives were practically the sole rulers of the small producer market, today they must also take into account a number of other formations (enterprise business work partnerships, independent business work partnerships, small businesses and small coops). It was from this point of view this time that the State Wage and Labor Office has examined the effects of the producer cooperatives' non-agricultural activities on the manpower situation of microregions and on the regional distribution of the forces of production. This evaluation had a considerably narrower focus than KSH's [Central Statistical Office] similar analysis of last year (see FIGYELO No 10, 1984), although its observations may be generalized rationally.

Today there are virtually no producer cooperatives without ancillary plants involved in one or more auxiliary activities, although luckily the times are gone when these ancillary plants were considered by some people as hunting grounds reserved exclusively for cleverly positioning profiteers.

It is clear that--because of their greater profitability--these ancillary activities have contributed significantly to the pre-

servation of our farms' financial equilibrium, the year-round, continuous employment of the cooperative membership (and the locally available free manpower) and the utilization of existing buildings. Within the scope of the examination (in 115 producer cooperatives) it has been found that last year 52.5 percent of the sales revenues came from auxiliary activities (compared with 40 percent in 1978). Only last year was there some decline in the dynamic increase in sales revenues that had characterized them year after year which is an indication of the increasingly active role of other types of small businesses, but also of certain--according to cooperative managers not unequivocally favorable--regulatory changes.

The decisive portion of sales revenues stemming from auxiliary activities still comes from independent marketing which requires a high degree of market sensitivity on the part of the cooperatives, although in recent years this sales revenue ratio has gradually declined. The sales revenue ratio resulting from commissioned work and cooperation-based activities which is assumed to require less independence and risk taking, however, has increased. In the cooperatives examined sales revenues resulting just from cooperation have almost tripled in the past 3 years which is an indication that cooperative-based ancillary plants are being gradually and increasingly incorporated into the sphere of activities of big industry.

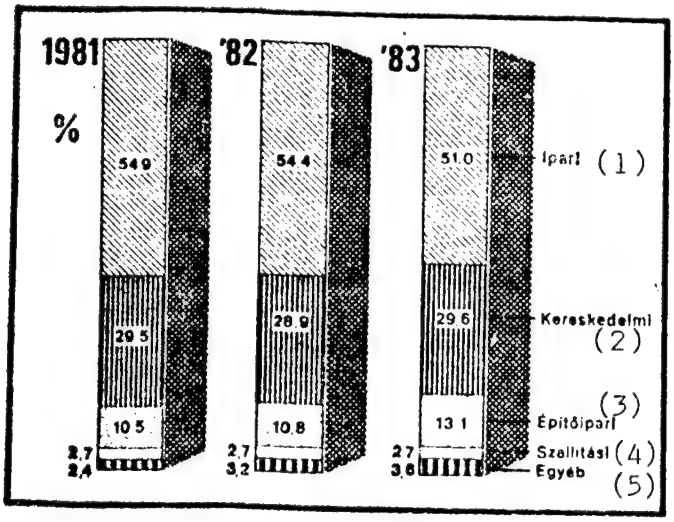

Figure 1. A Breakdown of the Sales Revenues of Ancillary Plants

Key:

1. Industrial
2. Trade
3. Constuction industry
4. Transportation
5. Other

Worn Out Machines

Who works in these ancillary plants, and what do they work with? Although in the cooperatives examined there was an increase in the gross value of the machine park of ancillary plants, this growth was not constant: between 1981 and 1982 it increased to 127 percent while between 1982 and 1983 it rose to 115 percent, which is an indication of dwindling investment possibilities. Another indication that gross increases in the value of fixed assets has come to a halt is the rate at which net value increases have declined, dropping to 105 percent from 1982 to 1983 compared with 111.6 percent in the previous years. Concurrently, of course, there has also been an increase in the wear-out rate of machinery, and only rarely can we find up-to-date, truly modern machinery and highly productive equipment in our cooperatives.

And if there are not enough machines, and if even the ones that are available are getting increasingly worse and outdated then all there is left is manpower. Initially--and precisely at the time some of the most passionate criticisms were first voiced--the preferred practice was to transfer people from basic activities to ancillary plants, and to increase the workforce by employing the local--mostly unskilled--"unemployed." Later they were also able to count on employees leaving big industry, first of all because for many it has meant being able to give up their commuter life styles. Although compared with 1982 last year there was no increase in the size of our cooperative workforce, the number of people employed in ancillary plants--at the expense of basic activities--continued to increase. In the 115 producer cooperatives examined 44.5 percent of the members were involved in auxiliary activities (in relation to basic activities their ratio has been 52.5 percent).

This great increase in the size of the workforce has been characteristic solely of the spheres of manual activies, the non-manual workforce has barely changed; in the past 3 years they have constituted 5.1, 5.5 and 5.4 percent, respectively. Why would it have changed when the administration of producer cooperatives involved in basic activities also perform most of these kinds of ancillary plant functions.

As for their workforce structure: they employ mostly semi-skilled workers, although the most dynamic growth has been in the number of skilled workers; from 1982 to 1983 it has risen by 140 percent, thus increasing their ratio from 35 to 38 percent. (The ratio of semi-skilled workers and unskilled laborers has been 46 percent and 16 percent, respectively.)

Most of those employed (64.5 percent last year) have been working in industrial plants in accordance with their ratio of the sales revenues. The others are employed in the construction industry (16 percent), trade, transportation and in factory units performing other types of activities (altogether 14.4 percent).

Incidentally: in most producer cooperatives there are no strictly defined job or sphere related duties. If they must, those employed in the ancillary plants will also perform basic activities, and vice versa. The lending and borrowing of manpower among our farms is a more typical phenomenon than inter-enterprise manpower loans in big industry, and recently it has become increasingly more common for producer cooperative members to be commissioned to do work for large industrial enterprises. The most recent phenomenon in several counties is for workers of industrial plants to participate in agricultural work.

They Earn Less

Naturally, the present evaluation has also touched on the income conditions of workers employed in ancillary plants. According to the KSH's data, in April 1984 the average monthly income in our agricultural producer cooperatives was 4,470 forints, 4 percent higher than in 1982.

Table 1. The Development of Average Monthly Incomes

	1982	1983	83/82 (%)
Manual	4,084	1,983	104.8
Non-manual	5,112	5,465	106.9
Auxiliary Activity	4,138	4,337	105.0

In other words, while the average monthly income of people employed in ancillary plants has been somewhat below the cooperative average, last year--compared with 1982--it increased at a better-than-average rate, especially among non-manual workers. Taking all of this into account, incomes earned in the ancillary branches still have not reached the national average for big industry and construction, falling below the county average in every county. For example: in Bacs-Kiskun the county average was 4,581 forints while the ancillary branch average was 4,138 forints; in Bekes the corresponding figures were 4,558 forints and 3,567 forints, in Fejer county 5,167 forints and 4,172 forints and in Szabolcs 4,416 forints and 3,684 forints, respectively.

Then why are--even today--producer cooperative-based ancillary plants so attractive? And can we expect this form of production perhaps to wither away next to other types of small businesses? Hardly. Although the national manpower market is characterized by surplus demand, in certain regions (as in Szabolcs, Vas, Zala, Hajdu-Bihar and Borsod-Abauj-Zemplen) there are also some employment problems, especially among unskilled women and among grade school and high school graduates entering the job market. If there were no producer cooperative-based ancillary plants where would these people find work? Some would find it in the cities, in the big industries there, by agreeing to commute on a daily or weekly basis. Women, however, can only temporarily be expected to lead

such a life style, while mothers with families in most cases cannot do it at all. The only reason men travel is also out of necessity: until a more acceptable job opportunity--in the form of a producer cooperative-based ancillary plant, for example--presents itself. There should be no misunderstanding: these ancillary plants can only alleviate not eliminate the employment tensions which characterize certain geographical regions. However, they much more effectively alleviate them than our various, enormously costly and only partially successful programs aimed at relocating industries to the provinces.

What can we expect in this economic "form?" According to the experts who have compiled the report most of our producer cooperatives want to expand their sphere of ancillary activities by the end of the extended plan period, although it is feared that their efforts will be constrained by our constantly narrowing investment possibilities. They will be especially constrained in the case of cooperatives with unfavorable habitats, for in their case even the development and gradual improvement of their auxiliary activities have not been enough to bring about the necessary financial growth that would allow them to catch up--or at least get close--to the cooperatives that are blessed with favorable habitat potentials. (For these latter have already enjoyed more favorable than average financial conditions in developing and continuing to develop their ancillary plants).

Enterpreneurial Confidence

We are at the point now where several counties have begun to request state assistance to help alleviate and resolve the employment tensions of microregions (from the central regional development fund, from development subsidies to be repaid from production taxes and from the differentiated subsidy system set up for producer cooperatives which must work under unfavorable conditions).

And we have come to the point today where it is mostly the producer cooperative managers (especially the managers of producer cooperatives which operate in the direct vicinity of big industrial centers) who complain about efforts by big industry to attract manpower. The existence and operation of enterprise business work partnerships, the proliferation of enterprises using experimental wage regulations and the presence in the marketplace of all other types of--compared with the national average higher income-yielding--small businesses have indeed narrowed the scope of movement of our producer cooperative-based ancillary plants. We can only hope that things do not get turned around again. We do not want the sudden recognition of the significance and importance of these ancillary plants to lead to restrictions on the conditions of competition--and in general, on the possibilities of operation--of the other participants in the field of small businesses. After all it does not matter that the producer cooperative-based ancillary plants are no longer in a position of small-business monopoly today, or that other competitors have appeared. Any

attempt, however, to restrict or hinder this competition in any way would lead to unpreventable repercussions: it would result in the suppression of a still embryonic enterprising spirit to the point where the damage would be irreparable, and in the shaking of--today still quite suspicious--enterpreneurial confidence.

Needless to say: this concern has to do with more than just our producer cooperative-based ancillary branches. Once we have decided to allow room and opportunity for small businesses to assert themselves, and to create a genuine competitive situation in this field we must leave it up to the competitors how they handle the competition.

9379
CSO: 8125/1616

MEASURES TO REHABILITATE, LIQUIDATE INEFFICIENT ENTERPRISES

Budapest FIGYELO in Hungarian 7 Jun 84 p 5

[Article by Dr Erzsebet Horvath: "In Place of a Magic Formula"]

[Text] The task of reducing inefficient production and developing a more efficient production structure--as an economic policy goal --was defined as early as the beginning of the 1970's. The measures to be prescribed have usually taken the form of statutory provisions. We have not, however, been able to develop forms of action and conditions that would have enabled us to compel enterprises operating at consistently and significantly lower-than-average levels of efficiency to catch up and to redistribute our resources to the extent needed.

Last year our government made a commitment to introduce a variety of central measures aimed at changing the status of enterprises operating at consistently low levels of efficiency in order to explore and eliminate the sources of loss which stem from poor performance. On the basis of extensive analysis and debates it was made clear what the criterium of low efficiency should be and how enterprises operating at low levels of efficiency should be treated.

The Standard

There are several well-known and applicable indexes which can be used to measure efficiency (such as productivity and export efficiency), but these are only able to cover certain sub-areas of enterprise activity. If possible, however, we should use a single, and preferably the most complex index as the means of measuring it. The standard must be well-known and measurable on the enterprise level, but it must also express the interests of the national economy. On the basis of these requirements it was the ratio of the fixed factors of production (the total sum of the net resource values and wage costs) and the existing equilibrium which has proven to be the most suitable measure for comparing enterprise performances.

According to this index economic organs are ranked by national economic sectors and branches, and those enterprises whose average falls below half of the weighed branch average--over a 2-year period--will be rated as poorly efficient. Using the national economic sector (branch) average as the basis of comparison, in addition to looking at regulatory and price conditions is justified by the practicality of setting identical yield requirements in all areas toward our available fixed resources. Identifying enterprises that are weaker than half of the branch average is justified by experimental facts and practical considerations.

This manner of rating, however, cannot be applied mechanically. For in the economy we can find activities where talking about profit incentives has limited relevance even in the long run, and where in addition to (instead of) commodity and financial conditions central decisions have a determining role in shaping the conditions of economic development. Consequently, in the case of enterprises identified as needing attention other considerations must also be taken into account.

Enterprises in which the official prices determined out of price policy considerations fail to ensure the realization of adequate revenues, or where the activity in question is governed by special regulations that are different from the ones generally applied, are expedient to treat separately. Of these the measures only apply to the ones where profitability is below half of the subbranch or specialized branch average.

Upon examination it may be justified to give special consideration to certain enterprises included among the economic organizations which on the basis of their balance data have been determined to have operated at consistently low levels of efficiency, if the quantity of their production is regulated by the national economic plan, if they are participating in the fulfillment of an international agreement, if their convertible exports are significant and they are in the process of living up to a commitment to expand them, if they employ people with alterd working capacity, or if they were reorganizad or established during the examined period.

On the basis of these considerations a determination is made every year identifying those consistently low-efficiency enterprises which require central measures to improve their management.

As a first step the above commitment has led to a definition regarding two of the most significant productive branches of the national economy, industry and the construction industry, providing guidelines for observing groups of low-efficiency enterprises and for determining which of them need to be subjected to necessary measures.

According to 1981-1982 data, in industry 64 ministry-controlled and local enterprises have proven to be less efficient than half of the average serving as the standard. While numerically speaking these producers represent nearly 6 percent of industry with a 30 percent share of sales, their overall performance in 1982 was negative. After thorough examination 27 of these enterprises have been subjected to central measures in the interest of improving their efficiency. While these enterprises--with the exception of mining and the electric energy industry--encompass every branch of industry, most of them belong to the machine industry, miscellaneous industry and the food industry.

According to their indexes, of the construction industry enterprises 17 state-controlled production units--turning out almost 2o percent of the branch's production--have been operating at low efficiency. The seven, mostly overground construction enterprises that have been selected from among them have had a 10 percent shareof the branch's resources and production, but only 2 to 3 percent of its output.

Three Steps

A significant change from previously launched campaigns is that this time the founding agencies have been given the authority and have accepted the responsibility to eliminate inefficiency. This does not change the fact that improving efficiency is an enterprise task, but since this cannot be achieved using any "magic formulas" we need central intervention--using basically material incentives--to attain it by force. Decisions about the fate of an enterprise--which may be justified in certain cases--cannot be expected to be made by anyone other than the founding agency.

In the interest of eliminating the causes of low efficiency and improving profitability the selected enterprises are liable--by also taking the effects of the central measures into account--to prepare an action program and to inform the collective about it at the various forums of factory democracy.

The recommended central measures may be broken down into three groups. Some of them may be immediately put into effect, others 2 or 3 years later at best, and if the efficiency of their management continues to remain low, and if none of this proves to have any effect a decision must be made whether or not to liquidate the enterprise.

On the one hand, the measures which can be put into immediate practice will have an effect on the managers' personal interests (e.g., withholding bonuses from the directors), and on the other, they are expected to prevent unprofitable activities from expanding or remaining at the same level (e.g., it can be ordered that the part of the depreciation write-off which is transferable to the development fund be put into a frozen account). Ordering to sell stockpiles and capital equipment may free resources for clearing possible financial obligations or for funding development that will

result in improved efficiency. A more consistent enforcement of bank foreclosures and the strict collection of outstanding debts will presumably stop producers from going into debt and from assuming irresponsible obligations. Our experiences show that one of the common causes of low efficiency is improper stockpile management. Hence it is also expedient to rate the enterprise's stockpile management, and where justified to make recommendations for withdrawing some of their turnover capital in the amount of a certain percentage of the average stock.

The measures that may be taken in the second phase (the withdrawal of subsidies and the withholding of frozen depriciation write-offs) are also aimed at forcing enterprises to make real improvements in the profitability of their production. The mandatory bond purchase requirement, on the other hand, is expected to prevent the undesirable expansion of inefficient activities, and to make it possible to reallocate resources for helping to complete other, efficient development(s). At the same time it does not mean that the enterprise must be liquidated since the returns from the resources invested elsewhere are brought back and can be used to develop efficient activities.

If after a certain grace period the possibility of eliminating the sources of loss has not materialized then steps must be taken to liquidate the enterprise.

It is the founding agencies which must determine--by thoroughly reviewing the situation of the enterprise and by assessing the need for every recommended measure--when and which types of measures are called for in view of the existing development possibilities. If continuing the operation of the enterprise is only justified on a reduced scale then the first step may even include resource-withholding measures. If in the given organization it does not appear possible to enforce profitable management then the expedient thing to do is to take immediate steps to transfer certain departments of the enterprise to other enterprises, or to liquidate (reorganize) the enterprise.

Initial Experiences

The briefly listed rights and obligations concerning the 34 enterprises have involved three ministries and ten county councils. Although the barely 1 year that has passed is a short time for assessing our experiences, summing up our initial observations may be both interesting and informative, especially from the point of view of the question "how to proceed from here?"

The measures introduced so far have been very carefully considered by taking into account the opinions of various corporate organs.

The enterprise action programs have been prepared by involving the collective, and they have been outlined at the forums of workplace democracy. The enterprises have been given the opportunity to learn about the details of regulation and about the average indexes that have been determined to serve as the standard. The measures aimed at eliminating low efficiency have had a positive effect on supplies to the population.

The founding agencies have completed their evaluation of the directors' activities, defined the bonus conditions in terms of the requirements and reviewed the stockpile management in every case; they have provided active help for preparing enterprise action plans and have supervised their implementation.

Some of the rcommended central measures (the withdrawal of turnover capital in the case of one enterprise, making investments contingent on preliminary approval in the case of one ministry-controlled and four local enterprises), however, have only seldom been applied, and some of the more severe measures (such as foreclosures, the stopping of depreciation allowances, the withdrawal of subsidies or tightening of their conditions) have never even been used by the founding agencies.

Some initiatives notwithstanding, the majority of the enterprises have looked to dynamic further development to find their way out of their difficult situation; they are not planning to cut either their workforce or thei wage costs, and they are not considering closing down any of their factory units.

The initial effect of central--and naturally enterprise--measures was already discernible in 1983. It could also be pointed out, however, that the new procedural order has been by far the most expedient in those enterprises, and the most improvements have been made in the situation of those places where profitability was between zero and half of the average serving as the standard. In 1982 the index of 40 percent of our enterprises was negative. Only a few of them have been able to improve their efficiency to the point where by 1983 they would be able to avoid further losses. In these enterprises it was no longer possible to take preventive-type measures.

Difficult Situation

The reason for this is that in the case of enterprises which are facing serious financial problems management is--if the enterprise cannot be liquidated--in a difficult situation because keeping them in operation--especially in the case of organizations which enjoy a position of monopoly--requires newer and newer preferential-type interventions.

On the basis of our experiences so far we need to underscore the importance of keeping the following considerations in mind:

--in those enterprises where the situation continues to worsen steps should be taken already at the outset to order the implementation of measures that will force them to improve their low efficiency (withdrawal of preferences and subsidies, resource cutbacks);

--the selective build-down--partial and possibly complete--of enterprises that have exhibited low efficiency for a long time must be more consistently carried out. By also keeping the possibility of reorganization and liquidation open action must be taken to initiate the process of income redistribution and capital withdrawal;

--in every case central financial settlements must be made contingent on the establishment of conditions that can provide the basis for real improvements in the enterprise's overall management and on the strict monitoring of the way the enterprises carry out the requirements and tasks prescribed for them.

These requirements should also be applied to a new group of enterprises. More specifically, there is an effort under way to identify enterprises on the basis of 1982-1983 data. In industry the number of enterprises that can be rated as being poorly efficient has risen from 64 percent last year to 85 percent, while industry's profitability has declined. Seventeen enterprises have left the group, at the same time, however, 38 have been added to it. In the construction industry the the average of the profitability index has increased, the number of organizations that are less efficient than half of the average has declined from 17 to 15 percent; in apartment and communal construction, in the specialized construction industry, miscellaneous and building maintenance specialized branches eight enterprises have improved their efficiency while six have become less efficient.

It is from among these that the enterprises to be subjected to central measures are selected on the basis of the already mentioned considerations. With certain modifications this procedural order will--starting in 1984--also have to be applied to the domestic trade branch.

The regulations and measures which govern the selection of low-efficiency enterprises are always considered auxiliary instruments of the given economic management system, and they should change together with it. In the course of the planned continued development of management and regulations one of our most important tasks is to ensure that efficiency requirements are asserted in accordance with our different forms of enterprise management, and that enterprise interests are more consistently expressed in terms of profitability indexes.

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BRIEFS

COOPERATION CONFERENCE--The Hungarian-Soviet light industry cooperation permanent working committee just finished a 6-day conference in Szeged this Saturday at which they discussed the deepening of economic and technical cooperation. The Soviet delegation of ministerial and light industry leaders consisted of A.A. Birjukov, all-union deputy minister for lighty industry, and G.P. Gamzemlidze, light industry minister for Georgia. The Hungarian working committee was represented by Imre Szabo, deputy minister for industry. The representatives informed the press of the results of the plant visits and discussions at the news conference. Among other things, they mentioned that at the meeting of the working group they discussed the basic developmental directions of light industry cooperation and talked about the technical modernization of Soviet light industry with Hungarian collaboration. According to the 1981 economic and scientific-technical cooperation decision of the intergovernmental committee of the Hungarian People's Republic and the Soviet Union, the May 1 Clothing Factory, acting as a primary contractor, will take part in the reconstruction of two Soviet clothing factories. The Georgian experts were in Budapest for continued training, and 20 Hungarian specialists went to Tbilis to take part in technical and scientific construction, as well as to guide operations. According to the high-level agreement, they will expand inter-enterprise cooperation in the field of ready-to-wear clothing and shoes. After taking part in the first modernization, the Hungarians will move on to other Georgian enterprises, and also take part in their modernization. [Excerpts] [Budapest NEPSZAVA in Hungarian 24 Jun 84 p 4]

MORE EXPORT RIGHTS--Ferenc Dull, department chairman of the Ministry of Foreign Trade told a correspondent of MTI, that the majority of agricultural and food industry foreign trade firms have established special sections to organize small-scale exports. First of all, they established offices in the border counties, and brought about strong links to the producers. Their experts tour the country and are setting up new stores. In the course of the past 3 years, the foreign trading companies gave the producers a development fund of 400 million forints. With the help of INTERINVEST [Foreign Trade Development Depository Association], several hundred million forints were given to improve production conditions and to organize the manufacturing of new exportable products. Presently, almost 60 cooperatives, enterprises, state farms and agricultural combines participate independently in foreign trade operations. Several of them joined forces and created new organizations. Seed exporters consisting of cooperative and state farms, for example, established HUNGAROSEED [Hungarian Seed

Exporting Company]. State farms which grow and process reed organized NADEX [Reed Exporting Limited Liability Company]. These new groupings are highly successful. Due to external markets, the exports of the enterprises involved grew at a fast pace. In 1984, more firms and cooperatives will get independent foreign trading rights. When conditions are still lacking to allow the granting of independent export rights, the ministry does grant special rights on a limited basis, up to the limit of one or two stores. In the past 2 years, 37 firms received 150 special export rights certifications. [Excerpts] [Budapest MAGYAR NEMZET in Hungarian 24 Jun 84 p 3]

CSO: 2500/430

NATIONAL INCOME DOLLAR VALUE, GROWTH RATE INDEXING DISPUTED

Overestimated Growth

Warsaw POLITYKA in Polish No 2, 14 Jan 84 supplement POLITYKA-EKSPORT-IMPORT pp 17, 20

[Article by Prof Bronislaw Wojciechowski, staff member, Institute of Foreign Trade Business Cycles and Prices, Ministry of Foreign Trade: "Countering Statistical Myths"]

> [Text] The author's estimates of Poland's national income will probably provoke a great deal of controversy. But that is exactly what we want to do--inspire a discussion--because certainly this problem deserves it. Statistics are not for the purpose of improving morale, but to give an honest picture of our economy and its place in the world. Succumbing to statistical myths has cost us too much. We encourage everyone interested, particularly specialists, to speak out.

The official data published not only in Poland but also by various international organizations (particularly the United Nations) indicate that Poland's national income grew much faster since the war than the world average. Let us use 1950-1980 as a basis for comparison. This period is long enough to be able to draw further conclusions and also there are comparable data for the period in different cross-sections. For comparison on an international scale, I will use the concept "gross domestic product" [in English], abbreviated GDP, calculated by a method accepted by the United Nations. This methodology departs from the principles for calculating national income used in Poland and other socialist countries, but the growth indexes calculated by both methods are very close. Although going from one method to another presents difficulties and leaves a certain margin of doubt, it is the only way we can reach our goal.[1] Table 1 gives the results of the respective calculations.

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[1] L. Zienkowski, "How the National Income is Calculated," PWE [Polish Economics Publishing House], Warsaw, 1971.

Table 1. Gross Domestic Product (GDP) Growth Rate for Poland and the World in Fixed Prices 1950-1980 . Official Data

Item	Average Annual Growth Rate, in Percent			
	1950-1960	1960-1970	1970-1980	1950-1980
Poland	7.9	6.2	6.0	6.7
World	4.6	5.1	4.1	4.6
incl countries:				
--socialist in Europe*	8.9	6.7	5.3	7.0
--capitalist developed	4.0	4.8	3.3	4.0
--developing	4.6	5.5	6.0	5.4

*From the USSR and Yugoslavia. There are no data for the socialist countries of East Asia, but they were included in the world data by estimate.

Source: Handbook of International Trade and Development Statistics 1983, UNCSTAD, New York, 1983. National Accounts Statistics 1965, United Nations, New York, 1967.

The figures cited would seem to show that Poland's economic growth rate between 1950 and 1980 was much faster than the world rate. According to these data we have clearly exceeded the growth rate of the developed capitalist countries, and to a lesser degree, the developing countries also, yielding only slightly to the socialist countries of Europe, treated as a whole (together with the USSR). That is what the official statistics say. I will now concern myself with a critical examination of these figures.

I will begin with the statement that according to the UNCTAD statistical handbook cited in Table 1, Poland's domestic product (GDP) in 1980 totaled 139.8 billion US dollars, which constituted 1.2 percent of the world's product and 2.7 percent of Europe's product. This is not much, considering that Poland's population during that same year was 0.8 percent of the world's population and 4.8 percent of the population of Europe. But perhaps formerly our share was even lower? If Poland's economic growth rate really exceeded--and very greatly, at that--the world rate, than it had to be so.

The reader may have some doubt at this point as to whether the differences in the growth rate shown in Table 1 are sufficiently large enough to have caused any important changes in the situation over the 30 years. They are really very large, actually enormous, if you consider the length of the time period examined.

From the indexes shown in Table 1 it would appear that the world product (GDP) grew approximately 3.8-fold during 1950-1980 and the product of the developed countries about 3.3-fold, while Poland's product grew 7-fold! Poland's share in world production should have grown correspondingly during that time. And here we come to the essence of the entire problem, because it turns out that

Poland's share in the world product (GDP) during the years 1950 and 1980 scarcely changed at all. All of the calculations and estimates made in the past both in Poland and abroad confirm this.[2]

II

Poland's share in the world product (GDP) as given by various sources or calculable from data contained in these sources, beginning with the 1950's, was constantly between 1.2 and 1.6 percent. In exceptional cases the estimates are still higher, even above 2 percent! But any supposition here that our share in world GDP not only did not grow but actually shrunk would be too hasty. The estimates that are being discussed here were made under very different conditions and in most cases require considerable correction if they are to be made comparable. Also, almost all of them turn out to be too high, to a greater or lesser degree. I think we should talk about the main reasons for this.

The first reason is that the size of the world product in former calculations was underestimated. Not included, for the most part, was China's product and that of some other countries (for lack of data), while the product of developing countries was only partially included. This, of course, made Poland's percent share larger. However, errors of this type can be corrected by comparing the results of the estimates in question for Poland with the size of the world GDP according to the latest estimates for the corresponding years.

The second reason for overstating Poland's share was that our GDP in US dollars was fixed too high. This was due, in part to the general tendency to embellish our economic achievements; however, I must say that the estimates made by the GUS (Main Statistical Office) and by the people affiliated with this institution were, on the whole, conservative and deserve confidence.[3] They were generally lower than the estimates of such renowned international institutions like the World Bank.[4] But there were also estimates published in Poland which were definitely too highly.

The third source of errors in the assessment of Poland's share in the world

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[2] I studied over 30 different calculations and estimates for the years 1950-1980 and also for the pre-war period. I will refer to some of these sources in my future arguments.

[3] I am referring primarily to L. Zienkowski's publications (e.g.: "National Income of Poland and West European Countries," GOSPODARKA PLANOWA No 6, 1973), and E. Krzeczkowska's (e.g., "Poland's National Income in Dollars," WIADOMOSCI STATYSTYCZNE No 10, 1976). Most of the estimates of Poland's national income in dollars made by the Main Statistical Office (GUS) have not been published, unfortunately.

[4] World Bank Atlas, published annually since 1965. For example, according to the World Bank Atlas 1972, Poland's GDP for 1970 was 46 billion US dollars, while according to Zienkowski, in the publication cited above, it was 39 billion US dollars.

GDP was the extrapolation of the respective indexes on the basis of calculations from previous and official indexes of national income growth rate. In using this method, Poland' share, as a rule, turned out to be higher the longer the period of extrapolation. The author of the foregoing article, in his former publications, did not notice these kinds of errors either. Only later calculations, made in the world prices of the respective year, convinced me that this method was erroneous when applied to Poland's national income.

III

I think that after these explanations I can go on to present Poland's share in the world product calculated in a correct way, that is, in comparable current prices for a given year. Table 2 shows the respective figures.

Table 2. Gross Domestic Product (GDP) for the World and Poland in US Dollars, in Current Prices, 1950-1980

Year	World	Poland	
	Billion US Dollars	Billion US Dollars	Percent
1950	696	8.2	1.18
1960	1,364	17.5	1.28
1970	3,076	39.0	1.27
1978	9,049	128.3	1.42
1980	11,287	139.8	1.19

Source: Handbook of International Trade and Development Statistics 1982, 1983. Economic Bulletin for Europe, Vol 31, No 2 (Comparative GDP Levels), United Nations, 1980. World Bank Atlas 1972, 1983. L. J. Zimmerman, "The Distribution of World Income 1860-1959," "Essays on Unbalanced Growth," 1962. L. Zienkowski, op cit., various GUS reports for internal use and other sources.

The data in Table 2 require several additional explanations. When reference is made to world GDP, I based my data on the UNCSTAD Handbook for 1983, but I reduced the figures for 1950-1970 by approximately 2 percent, taking into account the latestestimates of China's domestic product for the years 1973 to 1980, cited in the same UNCSTAD Handbook. The data for Poland for the years 1973 and 1980 were taken from the same source; for 1960 and 1970 I took the figures of GUS and L. Zienkowski, however I calculated the GDP for 1950 as the average of several of the most probable estimates.

The figures compared in this way show that Poland's share in the world product in 1950 totaled about 1.2 percent, and in 1960 it grew 0.1 percent, while in the next decade it remained unchanged. This share began to grow in the 1970's, reaching its maximum, i.e., 1.4 percent, in 1978 and then dropped again to the 1950 level. It should be added here that after 1980 a further drop in our share took place, so that in 1982 it was estimated at only 1.0 percent. Further developments show that during the next 2-3 years this share will not increase and may even drop further.

But it cannot be concluded from these figures, although they are very pessimistic, that Poland did not develop economically in the past 30 years. Its national income, without a doubt, grew, and even quite rapidly in comparison with former periods. But it grew much more slowly than official figures would indicate, and because the world economy also made a tremendous step forward during those 30 years, Poland's relative position between 1950 and 1980 did not change much.

IV

The question now arises, what was the real growth rate of our national income and how does it compare with the world rate? But although the figures expressed in current prices for each year are sufficient to define Poland's relative position in those particular years, fixed price data is necessary to calculate the growth rate. But how can we calculate Poland's gross domestic product during different periods, in 1980 dollar prices? So far, no one has made any such calculations and it is not possible for one person to do so. Also, use of 1980 data and official growth rate indexes for this purpose is out of the question, since as I have already shown, this method gives totally erroneous results in relation to Poland.

But a relatively simple method does exist, although it may not be absolutely accurate and may, to a certain degree, be controversial. Specifically, we can assume that Poland's share in world product in 1980 prices was the same as it was in the current prices of those years. If we accept this assumption we can, without difficulty, calculate Poland's GDP for each year in 1980 prices, using an estimate of world GDP in those prices and Poland's share calculated in the fixed prices of a given year as a basis.

But before I present the results of the applicable calculations, I must explain still one more problem. The reservations which appear in relation to the "official' growth rate of Poland's national income can also apply to other countries, which will affect the size of the world product in fixed prices and its growth rate. Actually, the same thing that occurs in Poland also occurs in other socialist countries, but to a much lesser degree. It is not my purpose to analyze the national income of the entire socialist camp and so I will not expand this subject further but will stop at making a correction, not a very large one, in the growth rate of the world income.

Assuming that Poland's share in a duly corrected world product (GDP), stated in 1980 prices, was the same as in current prices of successive years, we obtain new growth rate indexes, differing importantly from the "official" indexes. Table 3 shows the respective data for Poland and the world.

After correcting the data and making it realistic, it turns out that Poland's GDP, during 1950 and 1980, grew not at a rate of 6.7 percent yearly, but scarcely 4.34 percent yearly. During those 30 years it did not grow 7-fold, as the official data would show but 3.6-fold, which, in any case, is also not at all insignificant. But in the light of these figures, Poland's economic growth rate appears to be no larger than the world growth rate. However, we have exceeded, although not at all greatly, the growth rate of the developed capitalist countries, whose GDP during 1950-1980 grew at the rate of 4.0 percent annually.

Table 3. Gross Domestic Product (GDP) Growth Rate for Poland and the World in Fixed Prices, 1950-1980. Corrected Data

Item	Average Annual Growth Rate, in Percent			
	1950-1960	1960-1970	1970-1980	1950-1980
Poland	5.2	4.9	3.0	4.34
World	4.4	5.0	3.7	4.33

Source: Author's calculations based on data in Table 2.

Strictly speaking, we exceeded the rate of growth of these countries until 1978. During 1970-1978 the corrected growth rate of Poland totaled 5.6 percent, while in the developed capitalist countries it was 3.5 percent and the world average was 4.0 percent. During a 28-year period (1950-1978) the respective numbers for Poland are 5.2 percent, for highly developed countries 4.2 percent, and for the entire world 4.6 percent. Unqestionably the economic collapse in the late 1970's worsened Poland's position, but it did not basically change the proportions established in the preceding years.

V

I will now try to explain where these basic differences between the "official" and "corrected" economic growth rate indexes for Poland come from. From the purely statistical standpoint the problem is complicated, just as the methods for calculating national income in comparable prices are complicated. Therefore, of necessity, my explanations will be, to a certain degree, simplified in nature. Anyway, the fundamental causes for the differences mentioned are quite simple. They lie in the totally basic disproportions which appear in the ratios of domestic prices in Poland, relative to world prices, under conditions of enormous changes occurring in the materials structure of our national income. Almost the entire increase of Poland's GDP during 1950-1980 came in goods whose prices in 1950 (or at the time the given production was started), were relatively very high in relation to the prices of "traditional" goods. That is why the national income growth rate, stated in dollar prices, must be lower than the growth rate in domestic prices. The changes in proportions and price ratios which took place during the period in question exert an additional influence. "Official" indexes are based on ratios from the beginning of the period under study (either directly or through a complicated system of "linked" interconnections), thus these are Paasch-type indexes. On the other hand, the "corrected" indexes were calculated according to ratios from the end of this period, so they are Laspeyres-type indexes.

It would appear, therefore, that the "official" indexes cannot be regarded as being unequivocally false, and the "corrected" indexes as being solely true. Both types of indicators have a definite economic importance and their own range of usefulness. However, for purposes of international comparisons, I believe that only the use of the "corrected" indexes is right. I believe that comparing growth rate indexes for Poland, calculated in domestic prices, with indexes of other countries, calculated according to the UN method, is totally erroneous and misleads the reader.

If anyone wants to persist in believing that the "official" indexes are correct, he should follow through on the consequences of their use in international comparisons. Assuming that Poland's share in the world's GDP in 1980 amounted to 1.2 percent, and using the "official" growth rate indexes, we obtain, for 1980, a share amounting to scarcely 0.7 percent, i.e., almost half that of the most conservative estimates for that period. But, in turn, if we were to assume a share of 1.2 percent in 1950, then in using "official" growth rate indexes we would obtain in 1980 a GDP for Poland amounting to 271 billion US dollars, or twice as much as the UNCSTAD Handbook gives. Poland's share in world GDP would then amount to not 1.2 percent, but 2.3 percent! Both the first and the second alternatives are totally unrealistic and at variance with all available data.

The matter of the disproportion in national income growth rate indexes and the enormous differences between them depending on the method used was discussed in some publications,[5] but thus far, so far as I know, it has not been developed in detail. I believe that this problem has reached a point where it should be clearly dealt with.

VI

Since we have the data in uniform 1980 prices, we can extend the examination of Poland's GDP further, and in particular, we can determine how our domestic product changed in terms of one inhabitant and what position we occupy in the world, from this standpoint. (Table 4.)

Table 4. Gross Domestic Product (GDP) Growth Rate of Poland and the World per One Inhabitant, in Fixed Prices, 1950-1980. Corrected Data

Item	Average Annual Growth Rate, in Percent			
	1950-1960	1960-1970	1970-1980	1950-1980
Poland	3.4	3.9	2.0	3.1
World	2.5	2.9	1.8	2.4
incl countries:				
--socialist in Europe*	4.2	4.2	2.0	3.5
--capitalist developed	2.8	3.7	2.5	2.9
--developing	2.0	2.9	3.3	2.9

*From the USSR and Yugoslavia.

Source: As in Tables 1, 2 and 3.

[5]Economic Bulletin for Europe, Vol 31 No 2, United Nations, p 24-27; Z. M. Fallenbuchi, "The Polish Economy in the 70's," in: East European Economies Post-Helsinki, Washington, 1977.

The growth rate of domestic product (GDP) per one inhabitant depends to an equal degree on the growth rate of this product and on population growth. Developing countries, which have a particularly rapid population growth, have, as a result, a relatively slow rate of growth of national income per one inhabitant. In Poland the population growth rate is below the world average, thanks to which from the standpoint of the GDP growth rate per one inhabitant, we look somehwat better than from the standpoint of the GDP growth rate in general. But because of this, a comparison with developed capitalist countries is unfavorable. These countries, thanks to a relative low population growth rate, have achieved a GDP growth rate per one inhabitant, over the 30 years, not much lower than Poland.

Let us next compare income per one inhabitant in Poland and in the world, and in the areas which, from this standpoint, interest us the most. (Table 5.)

Table 5. Gross Domestic Product (GDP) in Poland and in the World, in Fixed Prices, 1950-1980. Corrected Data

Year	GDP per One Inhabitant			
	Poland in US Dollars	World	Soc. Countr. Europe[1]	Western Europe[2]
	(1980 Prices)	Poland = 100		
1950	1,573	83	101	230
1960	2,189	77	110	243
1970	3,203	70	113	246
1978	4,686	57	96	201
1980	3,904	68	112	253

[1]From the USSR and Yugoslavia.

[2]Capitalist countries of Europe (excluding European Turkey).

Source: Author's calculations based on data in Tables 1-4 and sources stated there.

In 1950 the income per one inhabitant in Poland was almost identical to that in the socialist countries of Europe, treated as a whole, but 20 percent higher than the world average. Compared to Western Europe we lagged far behind--its income per one inhabitant was 2.3-fold higher than in Poland.

Until 1978 there was a gradual, although rather slow and somewhat fluctuating, advance in Poland relative to other parts of the world. That year our product per one inhabitant was slightly larger than the average in socialist Europe, while that of Western Europe was only double that of ours.

During the next 2 years, unfortunately, there was a rapid regression, so that in 1980 we dropped, actually, to a position close to that of 1950. Only in relation to the world average can a certain improvement be observed. Unfortunately, the crisis which began in 1978 did not end in 1980. According to

a preliminary estimate for 1982, the average product per one inhabitant in the world was already 22 percent lower than in Poland. However, in the socialist countries of Europe this product was already 30 percent larger than in Poland, while in Western Europe it was almost three times larger than in Poland. Our position, therefore, in relation to our neighbors both on the east and the west, is now worse than it was in 1950. If we wanted to search for any kind of encouraging figures in this regard we would have to attempt to make comparisons with the years immediately after the war. But we do not have comparison data for that period; anyway, those days are long gone and most Poles did not live through them and do not remember them.

The picture outlined here may be completed by comparing the product per one inhabitant in Poland with that of some specific countries. According to data in the UNCSTAD Handbook for 1980, we were ahead of just three countries in Europe: Romania, Yugoslavia and Portgual, and undoubtedly Albania, on which were have no data. Italy, with whom we presumably kept up economically many years ago, had, in 1980, a GDP per one inhabitant of 6,916 US dollars, i.e., 77 percent more than Poland. Spain, whose gross domestic product per one inhabitant in the 1950's was estimated at being below that of Poland's, had 5,625 US dollars in 1980, which is 44 percent more than Poland. I will not cite data from other, even wealthier countries because I am not interested in stressing the absolutely low level of our national income but I am primarily concerned with showing its unsatisfactory growth rate.

If the growth rate of Poland's national income is to be fundamentally corrected, it will be necessary to critically reexamine the materials structure which establishes it as well as the structure of its division. It should be particularly interesting to determine the actual rate of consumption and investment, because only then, on the basis of these data, will it be possible to reply to the question on how the population's standard of living was established as compared with other countries. But these are very complicated problems, and that is why I will restrict myself simply to calling attention to them.

Faulty Methodology

Warsaw WIADOMOSCI STATYSTYCZNE in Polish No 5, May 84 pp 1-4

[Article by Jan Gawronski and Dr Zenon Rajewski, staff members, Statistical and Economic Research Center, GUS (Main Statistical Office): "Problems in Converting the National Income Into Dollars"]

[Text] It is the purpose of this article to describe the fundamentals applied in international practice to calculate the national income of particular countries in terms of US dollars and Polish practice in estimating this category. The article was prompted by Bronislaw Wojciechowski's recent article in which he uses a statistical calculation of Poland's share of national income in dollars in the world income to verify data on Poland's economic development,[1] published in statistical handbooks. The main thesis of the cited article

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[1]Bronislaw Wojciechowski, "Countering Statistical Myths," POLITYKA-EXPORT-IMPORT, No 2, 1984.

states that Poland's economic growth rate index for 1950-1980 was much lower than our official statistics show. The credibility of this thesis depends entirely on the credibility of the material on which the author bases this thesis, i.e., the already mentioned estimates of Poland's national income and the world's income in dollars. Because use of these estimates as proof of the author's basic thesis may arouse doubts as to the degree of their credibility, it seems essential to cast more light on the problems connected with current practice in making this calculation both in relation to the estimates made by the Main Statistical Office for Poland and estimates of world income made principally by qualified international organizations and UN agencies.

In contemporary international practice the category of national income converted to dollars is the most common measure of the economic development of countries, the basis for grouping countries according to their degree of economic development, and for calculating the world sizes of national income and the share of the individual countries in world income. The size of income in dollars is the basis for constructing general statistical yardsticks used in studying the level of economic development, in observing development trends and structural transformations in individual countries or groups of countries. This category is also used by individual countries and international organizations in planning and forecasting and in making current decisions in economic and financial negotiations, etc. For example, the level of the national income per one inhabitant converted into a common currency (most often into US dollars) forms the basis for establishing the size of contributions and principles of credit policy in the International Monetary Fund, for establishing the size of the membership fees in many international organizations, in establishing amounts of economic assistance to some countries, in determining the principles of participation in joint economic ventures, etc.

In the current practice of international comparisons, two methods are used to convert national income into dollars: based on official currency exchange rates and based on a ratio which reflects the actual purchasing power of a given currency in relation to the dollar.

The first method of converting national income into dollars on the basis of official currency exchange rates is used quite widely because it is relatively simple and convenient. The result of conversion by this method is the total size of the national income, which is why the calculations being discussed make it possible only to determine the total size of the economic potential of a given country in comparison with other countries or groups of countries.

Conversion of national income on the basis of a ratio which reflects the actual purchasing power of the currency requires that special, detailed comparisons be made, through bilateral or multilateral procedures. These comparisons, generally speaking, consist of converting the value of the national income into the currency of another country based on individual indexes of representative-commodity prices, which are then duly aggregated into group indexes. The results obtained on the basis of such comparisons contain detailed information on the level and price ratio for not only the entire category being compared (national income), but also on the elements which comprise it. Conversion of national income based on detailed comparisons is considered to be very accurate and provides a large resource of detailed information (on the level, structure and ratio of prices according to a wide

range of commodity groups). But the scope of such study is limited only to those countries which take part in the comparisons and to those sporadic or regular periods when such studies are being conducted.

Conversion of national income to dollars based on official exchange rates and based on the purchasing power of a currency can, and usually does, give different results, depending on the differences between these ratios for a given country. Generally speaking, the spread between both ratios, and as a result also the spread between the national income in dollars converted on the basis of both the first and second ratio, will be larger the larger the differences occurring in a given country between domestic prices and world prices applied in foreign trade. That is why acceptance, in comparative analyses, of the national income category in dollars requires that the conversion method be known and that there be an awareness of all of the conventionalities and limitations involved with the use of both the first and the second method.

The range and frequency of the use of either method is dependent on both the technical capability of making international comparisons and the need for and purpose of the comparison.

Despite many reservations as to estimates made on the basis of the exchange rates in effect, this method is the one frequently used. This is understandable, if only for practical reasons, particularly in the case of approximate and orientational estimates. Furthermore, this is the only method by which it is possible to estimate the income of almost all countries in the world and to make these estimates only on the basis of available statistical data, at any time and for any need. It is not surprising, therefore, that many international organizations use this method, including the World Bank, the United Nations, UNCSTAD, and others.

On the other hand, the conversion method using the ratio of actual purchasing power of the currency is also known. Although it is believed to be more accurate and causes fewer reservations it is used less frequently. The reasons for this include, for example, lack of continuity in international comparisons, their tremendous complexity, the high costs of the entire undertaking, enormous organizational difficulties, and the limited range of countries which have thus far participated in such studies.

B. Wojciechowski, in the article cited, states that according to the UNCSTAD statistical handbook, Poland's gross domestic product (GDP) in 1980 amounted to US$139.8 billion.[2] Acceptance of this amount would mean that income per one inhabitant in 1980 was $3,929, while the ratio of both currencies was about 18 zlotys to a dollar. The World Bank gives similar figures for Poland in 1980 ($3,900 per inhabitant).[3] Figures similar to those were also obtained

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[2]Gross domestic product (GDP) is a category used in the statistics of Western countries. It can be most generally described as gross national income together with results of operations in the area of nonmaterial services.

[3]Rapport sur le developpement dans le monde 1982, Banque mondiale, Washington, 1982, p 127.

on the level of the national income and the purchasing power of the zloty in relation to the dollar, on the basis of a multilateral comparison of European countries as part of a United Nations research program (International Comparison Project, or ICP). Therefore, it should be emphasized that Poland's level of national income given in dollars was obtained on the basis of the ratio reflecting the actual purchasing power of the zloty to the dollar, i.e., the result of the level and structure of domestic prices on our market. This is really the average price ratio for the entire product, covering market goods and services as well as nonmarket services, including a number of services at relatively low prices, such as housing rents, public transportation services, and also a relative low level of wages in the case of nonmarket services (e.g., health services, schooling, culture, science, administration).

The results of comparisons on the basis of the above-mentioned multilateral studies of European countries as part of the ICP research program for 1980 reflect an area of uncertainty which is difficult to quantify. This is due to reasons which are inherent in the theoretical construction of these types of comparative studies as well as those which ensue from practical solutions accepted during the course of the studies. These are comparisons made by studying samples of representative-commodities for specific assortment groups which make up the basic categories forming the national product. For these commodity-equivalents, precisely selected in each of the countries being compared, individual prices indexes are calculated which are then the basis for calculating the group price ratios and the higher-aggregated group price ratios, all the way up to the category of the entire national income inclusively. Without going too deeply into the technical details, it can be seen that already at this stage of the comparability work, despite the best efforts made to observe the principles of selection and pricing of the representative-commodities, it is difficult to guard against certain simplifications and deviations which can, as a result, lead to calculation of incorrect price ratios and reflect on the reliability of the final results. In particular, allowance must be made in cases of transgressions of the principles of representativeness in selecting commodities from the standpoint of the price structure in the country and from the standpoint of the typicalness of a given commodity on the market and its share in consumption.

The next factor which helped to decrease the accuracy of the results was the matter of comparing countries of difference socioeconomic systems. Many institutional problems in the various services and administrations (e.g., health services, schooling, housing services, financial services, etc.) are very different in these countries, so to make them comparable additional methodological solutions must always be applied. In many cases these are even solutions of a contractual nature which, when settling specifics in a manner which is most adequate for a given situation, have a certain margin of arbitrariness, and thus must in some way influence the final result.

When discussing the accuracy of the results of the European ICP comparison for 1980 we should consider them from the aspect of the specific comparability conditions in Poland's circumstances. As compared with previous international studies in which Poland took part, in 1980 comparability conditions in Poland were much worse as a result of the growing crisis, the depletion of the market, the shortage of goods, the deterioration of their quality, etc. Under such

conditions the selection and pricing of representative-commodities was really difficult and certainly a situation such as this had to influence, although to a degree hard to define, the final value of the comparison figures for Poland for 1980. Therefore, an overall assessment of the results and an additional analysis of the comparison material tends to make us believe that the purchasing power of the zloty in relation to the dollar in 1980 for the entire national product was somewhat overstated in this study and was probably in the range of 17 to 19 zlotys to dollar (the comparison result showed 16.54 zlotys to a dollar).

We get a different figure on the size of Poland's national income in dollars, as well as on its level per one inhabitant, when we use the official exchange rate of the zloty to the dollar in making the conversion. If we take as the official exchange rate the rate applied in 1980 for nontrade transactions, or 33.20 zlotys to a dollar (the exchange rate for trade transactions was not directly established), then the gross national income (GDP) converted by this exchange rate will total 75.3 billion dollars, i.e., over $2,100 per one inhabitant. As we see, the difference in the estimate made using both the methods discussed is considerable, because the level of income calculated on the basis of the actual purchasing power of the currencies is approximately 75 percent higher than the level of income calculated on the basis of the official currency exchange rate.

The spread between the ratios (and level of national income) would be still different if the official exchange rate for trade transactions in 1980 had been calculated by an indirect method, i.e., accepting 1 dollar amounting to 3.336 foreign-exchange zlotys and the converter used to establish transaction prices for turnovers with the second payments area [capitalist countries] (15 circulating zlotys to 1 foreign-exchange zloty). In this case the official exchange rate would have been 50.42 zlotys to a dollar.

When we compare the above data the question somewhow automatically arises--what is the reason for the large difference between both these cited ratios for Poland? The reasons lie mainly in the differences in the price structures of our domestic market and the world market. In converting the national income on the basis of the official currency exchange rate we assume that all elements of the income were converted in average world market prices. This pertains to both those elements of the national income which, as a rule, are the object of foreign trade, as well as that part of the income which practically cannot be the object of foreign trade (in the literature both these categories are described in English terminology: "tradable goods" and "nontradable goods").

In many of the detailed international comparisons which have been made it appears that the indexes of the actual purchasing power of the currencies and the obligatory exchange rate are more differentiated between countries the lower their national income per one inhabitant of some country, in comparison with countries which have a high income. It is generally believed that the basis of these spreads in currency exchange rates and purchasing power indexes is the existence of differences in labor productivity, wages and prices in low national income countries as compared with high income countries, in relation to the production of those goods which can, and goods and services which

primarily cannot, be the object of international exchange. The following interpretation is cited here.[4] In countries which have a high income and normally high labor productivity, as well as high wages, there is a tendency to set high prices on goods and services which can and cannot be the object of international trade. However, in countries which have a low national income and low labor productivity there is a tendency to set relatively low prices and wages in nontradable-goods production sectors. Therefore, the less developed a country, the lower the prices on its nontradable goods, and the greater the tendency to underestimate--in comparison with the wealthier countries--its product which is converted using the obligatory exchange rate. Following are examples of these spreads drawn from UN studies--the International Comparison Project for 1975,[5] and similar studies for Europe for 1980.[6] The data were given in the form of indexes of deviation from currency exchange rates for a US dollar in the respective year, as compared with those obtained from comparisons with the purchasing power ratios of the respective currencies.

	1975	1980
Poland	1.39	2.29
Hungary	1.68	2.87
Yugoslavia	1.56	1.53
Romania	1.37	-
Spain	1.36	1.32
Ireland	1.14	1.24
Italy	1.12	1.33
Great Britain	1.11	1.04
FRG	0.88	0.90
France	0.91	0.95
Denmark	0.79	0.89

The above list shows that Poland belongs to the group of European countries in which the spread between the actual purchasing power and the official exchange rate is relatively large. This was caused by the relatively low prices of goods and services which were not, as a rule, the object of foreign exchange, both in relation to prices of goods subject to international exchange and in relation to identical prices in West European countries (e.g., France and Austria). For example, in 1980 in Poland prices were relatively low on books and newspapers, tailoring and shoe-repair services, public transportation, barber and beauty shop services, cinema and theater tickets, housing rents, and there was a relatively low level of wages in nonmarket services (education, schooling, science, health service).

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[4] I. Kravis, A. Heston, R. Summers, "New Insight Into the Structure of the World Economy." The Review of Income and Wealth, No 4, 1981.

[5] I. Kravis, A. Heston, R. Summers, "World Product and Income." International Comparison of Real Gross Product.

[6] Based on temporary results of ICP European comparison for 1980.

The above information on estimates of Poland's national income in dollars and the results obtained using various estimating methods shows the conventionality of this category as well as the need for a great deal of caution in using these data for analyses and international comparisons. It is believed, as a rule, that results of direct comparisons (based on study of the actual purchasing power of the currency), covering a lesser number of countries, of an approximate level of economic development--and thus the same socioeconomic system--are more reliable.

We should examine the estimates of world income in dollars, i.e., covering all of the countries in the world, as made by international organizations, in the light of the above. We will not go at all into the complex and highly varied problems of comparability, accuracy and availability of data on the national income of various countries, calculated in the currency of a given coountry. These estimates given in one currency are, of necessity, made on the basis of official currency exchange rates and serve the specific needs of the organizations which prepare them. They are much less useful for detailed comparative analyses, and particularly in determining the spread in the level of national income between countries, principally because of the already mentioned rule of understating the national income in countries of a lower economic development. But it seems that even for the limited needs of an estimate of world income, this category for individual countries should be converted consistently on the basis of this same method, i.e., by using official currency exchange rates. There was no such consistency in these conversions up to 1980.

World Bank estimates for 1980 and the preceding years for CEMA countries and the other countries of the world were prepared by using various methods.[7] For Poland and other CEMA countries the estimates were made by direct or indirect referral to the actual purchasing power of the currency (in relation to the dollar). The income for the remaining countries of the world was estimated on the basis of official currency exchange rates. In the calculations for 1981, changes were made in the rules for estimates insofar as Hungary and Romania were concerned--they were new members of the International Monetary Fund. The conversion of the national income of these countries was conducted according to official convertible exchange rates for trade transactions. For the remaining CEMA countries, estimates were discontinued until a generally acceptable method for converting the incomes of these countries was developed.[8] The change in how the estimates were made meant, for example, that the income per one inhabitant of Hungary, which in 1980 was $4,180, dropped in 1981 to $2,100. As a result there was a corresponding, very large for this country, drop in the index of Hungary's share in world income.

The above example shows how uncomparable estimates of world income in time really are. Difficulties in time comparisons are the result not only of the change in the estimating method, but as in the case of Hungary, also because there is no stability in the official exchange rates. The estimates being

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[7] Rapport sur le developpement dans le monde 1983, op cit, p 169.

[8] Rapport sur le developpement dans le monde 1982, op cit, p 127.

discussed are made annually in current prices and according to the average, for the given year, exchange rates. In the second half of the 1970's and now in the most recent years, more confusion on the international market has been observed, the application of many trade restrictions, trade barriers, rigorous control of foreign exchange, which, as a result, has made the currency exchange rates much more fluid in relation to the dollar. The lack of stability in exchange rates may bring about erroneous interpretations of results when comparisons in time are made. For example, if in two time periods the income per one inhabitant in domestic currencies grew by the same percentage, then the growth in the currency exchange rate index in the second period had to show a change in the ratio of the levels of incomes in these countries in terms of dollars, despite the fact that income per one inhabitant in both countries grew at the same percentage rate.

The above general example may be applied to a concrete situation, drawn from the already cited reports of the World Bank for 1980 and 1981. The data taken from this report reflect the national income per one inhabitant in current dollars each year for three countries:

	1980	1981	1980=100
United States	11,360	12,820	113
Japan	9,890	10,080	102
Great Britain	7,920	9,110	115

The changes shown in the level of national income in 2 years were the result mainly of a change in currency exchange rates in Japan and Great Britain in relation to the dollar, and to a lesser degree were caused by an increase in income volume, which in fixed prices increased in 1981 in Japan by approximately 4 percent, in the United States by approximately 2 percent, while in Great Britain it dropped by about 2 percent. As a result of the changes in currency exchange rates, there was a change in the relation of the level of the national income among the three countries in a direction reverse of that which would follow from the growth of income volume (at a United States = 100 level, the relation for Great Britain rose from 70 percent in 1980 to 71 percent in 1981, while the relation for Japan fell from 87 percent in 1980 to 79 percent in 1981).

The example cited illustrates the relativity of the usefulness of comparison figures on the country and world scale and their use for purposes other than that for which they were prepared, even if they were the object of comparison for two adjacent years. World Bank estimates are prepared mainly to rank and group countries according to specified criteria and level of economic development. However, they should not be used as basis material for preparation of in-depth comparative analyses, and especially for time comparisons and observation of changes in ranking of particular countries from the standpoint of their share in world income.

9295
CSO: 2600/1048

BRIEFS

NEW ELECTRONIC PRODUCTS--The latest new products of the "Telpod" Research and Development Center in Krakow working in collaboration with the Electronics Institute of the Mining and Metallurgy Academy in Krakow are an electronic ignition device for "Polonez" cars and microprocessor controllers for elevators. These electronic ignitions, which take the place of conventional circuit breakers and thus lead to substantial fuel savings, are already in production. Every month 2,500 of these units will be produced here for FSO in Zeran. The microprocessor controllers will go into production in the next few days. The factory has already signed a delivery contract for these units with the ZREMB firm in Warsaw. [Text] [Warsaw TRYBUNA LUDU in Polish 26 Jun 84 p 2]

CSO: 2600/1050

ACTIVITY OF INDUSTRIAL CENTRAL FOR PRECISION MACHINERY

Bucharest ERA SOCIALISTA in Romanian No 10, 25 May 84 pp 41-43

/Article by Dumitru Ieremia: "Regular Promotion of Technical Progress Essential to Quality and Efficiency in the Economy"/

/Text/ In accordance with the guidelines set by the 12th Party Congress and the National Party Conference, the productive forces are being developed and modernized in the current period by means of the intensive factor and by intensive promotion of the technical-scientific revolution in Romania. Precision machinery has a vital part to play in promoting technical progress in various fields. Accordingly precision machinery production, which is a distinct sector of Romanian industry, is logging a higher developmental rate than that of the machine building industry as a whole, and the requirement for hydraulic and pneumatic equipment as well as highly complex technological equipment with a high degree of automation, measurement and control devices, etc. is to be entirely filled.

The Program for Technical and Qualitative Improvement of Products, Reduced Consumption of Raw Materials, Fuels and Energy, and Better Use of Raw Materials and Materials in 1983-1985 and on to 1990 calls for more rapid development of production of quality control and measurement devices, automation means, and instruments with superior performances up to the current standards of peak technology, requiring new objectives and proportions of the activity of the precision machinery industry. By its very nature this industry helps to make better use of raw material and material resources throughout the economy, to make efficient use of the technical-professional experience acquired, and to supply the constantly growing requirements of all sectors of the economy with its products. In general it may be said that the precision machinery industry is both a requirement and a corollary of a high technical potential, since it provides for product quality and greater labor productivity and economic effectiveness.

In view of the importance of precision machinery production today, the CIMF /Industrial Central for Precision Machinery/ was founded under the Ministry of the Machine Tool Industry, Electrical Engineering and Electronics, a central that now groups a great many enterprises by the criteria of similarity of products and manufacturing technologies, cooperation in production, and integrated manufacture of the finished products. It was based on the structure of the Bucharest

Precision Machinery Enterprise, one of the oldest and most representative units manufacturing measurement and control devices, tools and accessories for machine tools.

As plan administrator the CIMF keeps trying to develop and modernize production, to further scientific research and introduction of technical progress, to differentiate and specialize the enterprises under it, to develop its international cooperation and foreign trade, to use its fixed and circulating capital efficiently, and to reduce production costs and increase profitability. In order to make better use of raw material resources and reduce imports of products in the nature of precision machinery, the central has developed a strategy of its own chiefly for increasing physical production, promoting technical progress, introducing modern technologies that will raise the technical-operational parameters of the products, prospecting market demands, assimilating products derived from Romanian research, etc.

Meanwhile the CIMF is also emphasizing solution of problems of peak technology, in view of the high technical level of its enterprises' equipment and the wide variety of technologies that can be used and of products that can be assimilated and manufactured. In general, regular promotion of technical progress in precision machinery production also modernizes the other industrial sectors.

Commodity production has been steadily increased in the precision machinery industry partly by building new productive capacities in the existing units and partly by making better use of the technical-material inventory. In order to provide for production capacities to meet the whole economy's requirement for precision machinery components and manufactures, the Uniform National Plan allocated over 2 billion lei in investment funds in the 1981-1983 period. The investments in the precision machinery sector are characterized by the high proportion of the supply of machines, equipment and installations and also by the activation of the new capacities in relatively short time limits, which usually do not exceed 14-16 months.

Steady progress of the investment projects assigned to the Arad Industrial Horology Enterprise and the Radauti Instruments Enterprise is planned for this year and the next period. New capacities will be built at the Gura Humorului Instruments Enterprise, the Radauti Instruments Enterprise and the Botosani Plates Enterprise, and new expansions will be started at the Sibiu Balanta Enterprise, the Radauti Factory for Machine Wares and Tooling, the Vaslui Enterprise for Measurement and Control Devices, and the Focsani Enterprise for Hydraulic Tools and Equipment. All these investments will yield about a 25 percent increase in industrial output by 1990 compared with 1984.

Comprehensive in structure, composition and activity, the CIMF includes enterprises with old traditions in the production of measurement and control devices for lengths, masses and thermotechnical magnitudes and of tools and accessories for machine tools and hand tools, such as the Bucharest Precision Machinery Enterprise, the Brasov Enterprise for Machine Tools and Tools, the Risnov Tools Enterprise, the Bucharest Enterprise for Testing Devices and Equipment, etc. Its complement also includes newly created units like the Blaj Enterprise for Machine Tool Accessories, the Bistrita Machine Enterprise, the Pascani Enterprise for Special Tools and Accessories, the Vaslui Enterprise for Measurement and

Control Devices, the Drobeta-Turnu-Severin Factory for Measurement and Control Devices, as well as units restructured or specialized to produce hydraulic and pneumatic equipment like the Bucharest Steaua Rosie Enterprise, the Rimnicu-Vilcea Enterprise for Hydraulic Equipment et al.

The geographic distribution of the enterprises in the precision machinery sector covers the entire country with about one unit to every two counties, meeting the requirements of the enterprises in all areas for specialized products. And in order to meet the CIMF units' particular needs for raw materials and materials, an enterprise for special and forged steels has been built and is being developed at Cristuru-Secuiesc that is assimilating various types of steel for tool production in keeping with the requirements of the central's units.

The CIMF is trying to keep increasing the output of the particular varieties of the precision machinery sector while looking for ways to expand the manufacture of new varieties of products with superior and high-quality characteristics. It is accomplishing this chiefly by adapting each enterprise to the manufacture of a particular assortment of products for purposes of standardizing and improving their quality and obtaining an increasingly high productivity. Over 50 percent of the assortment of products of the precision machinery sector consists of measurement and control devices and hydraulic and pneumatic equipment.

The CIMF enterprises produce and supply their beneficiaries with a very wide assortment of products, consisting of nonelectric measurement and control devices, steel cutting tools, cutting tools with plates of sintered metal carbides, diamond-studded tools, machine tools and tools with pneumatic drives, hand tools and machine tools, hydraulic and pneumatic elements and equipment, machine tool accessories, miscellaneous tools, etc.

In the technical-scientific revolution rapid integration of new scientific and technological advances into current production is a basic requirement for creating a modern, highly productive and efficient industry. There it is one of the constant aims of the CIMF to supply the economy with products with technical-operational and precision parameters up to world standards for comparable products. The list of products in manufacture is analyzed periodically and measures are taken to keep them in step with the demands of technical progress. Accordingly within 3-5 years at most every product is scrutinized in the specialized technical services, which determines the redesign and modernization of the product or modification of its design according to the demand so that its obsolescence will be minimized. Through application of the program to promote technical progress and improve product quality, the proportion of the products up to world competitive standards will be raised to more than 65 percent of the whole list by 1985.

The scientific research and technological engineering work of the CIMF's units was planned and organized in the spirit of the decisions of the 12th Party Congress and the National Party Conference and of the special programs recently adopted by the party and state is directly helping to raise the technical and qualitative levels of products, to develop new technologies and modernize existing ones, to expand mechanization and automation, to improve typification and standardization of products, and to further labor productivity and economic effectiveness. New and redesigned products accounted for 50 percent of the value

of the 1983 commodity output. Manufacture of 22 new products in the state plan was assimilated, including pulse meters, differential pressurestats and electromagnetic delayers at the Bucharest Precision Machinery Enterprise, 315-bar hydraulic equipment at the Sibiu Balanta Enterprise, dosing equipment and two-line lubricating units at the Rimnicu-Vilcea Hydraulic Equipment Enterprise, and 20-horsepower pneumatic motors at the Bistrita Machine Enterprise. Actually all of the central's enterprises are logging high proportions of the new and redesigned products in their total commodity outputs. The best results in that respect have been obtained at the Bucharest Precision Machinery Enterprise (57.5 percent), the Bucharest Enterprise for Testing Devices and Equipment (57.6 percent), the Focsani Enterprise for Hydraulic Tools and Equipment (61.3 percent), the Vaslui Enterprise for Measurement and Control Devices (62.9 percent), the Bucharest Steaua Rosie Enterprise (71.3 percent), the Pascani Enterprise for Special Tools and Equipment (80 percent), and the Rimnicu-Vilcea Hydraulic Equipment Enterprise (91.6 percent).

Along with the regular activities of the sector, the CIMF is constantly concerned with expanding and diversifying its enterprises' outputs in order to exploit the major potential of their equipment and highly skilled labor force. The central's units are implementing some priority programs for making machine tools and tools for the mining and petroleum industries, and they are supplying the aeronautics industry with a wide assortment of precision machinery or subassemblies, from special tools to measurement and control devices. Meanwhile intensive collaboration has been developed with various enterprises in the light, forestry, printing and other industries on the manufacture of special tools, dies, and devices. This is not only improving their quality but also ensuring reasonable delivery prices for those products.

Scientific research and technological engineering in the precision machinery field is focused on developing new types of measurement and control devices and hydraulic and pneumatic tools and elements while also reducing imports of them. Meanwhile the Scientific Research and Technological Engineering Center for Precision Machinery and Tools is heavily emphasizing the priority program for modernizing the control technologies, especially in the units making hydraulic and pneumatic equipment and tools (such as the Bucharest Steaua Rosie Enterprise, the Focsani Enterprise for Tools and Hydraulic Equipment, and the Risnov Tools Enterprise). Composite control devices have also been made for passenger-car production and for the industry making the corresponding components. The center has also developed a small-scale production sector of its own, making single-series or small-series products designed on the basis of its own research or at the requests of various beneficiaries (for example, a speedometer for industrial locomotives, a meter for hours in operation for motor vehicles, etc.).

Scientific research and technological engineering work, as well as plant research within the CIMF's enterprises, are now emphasizing some problems of electronizing and applying optics to measurement and control devices, development of some composite control and testing stands for various industrial sectors, production of parts and tools of sintered metal dusts, and manufacture of medical instruments and apparatus, and special programs have been planned according to the characteristics of the enterprises involved as well as their research capacities so that results will be obtained as soon as possible and development of production will correspond to the trends in the worldwide evolution of precision machinery.

Along with those efforts, scientific research is working on development of a complete inventory of precision machinery to prepare the enterprises, especially those specializing in hydraulic and pneumatic equipment and measurement and control devices, to participate in the programs for the manufacture of industrial robots for various purposes and uses. Note also that the Bucharest Enterprise for Testing Devices and Equipment, in addition to its research, design and production activities, is developing the necessary capacities to provide services in the field of testing apparatus and equipment of all types existing in Romania.

Alongside development of its regular particular output, plant research in the enterprises with precision machinery traditions and experience is emphasizing self-equipment with machines, equipment and complete installations on a high technical level. To this end the CIMF has instituted a centralized self-equipment program specifying the assortments of machines in the production of which various enterprises will specialize. The value of the equipment so acquired has increased annually, while the inventory requirements for new machines and equipment have been met. Last year the Bucharest Precision Machinery Enterprise for example, assimilated and produced, through self-equipment, special machines for processing precision draw plates of sintered metal carbides, composite installations and stands for controlling, testing and calibrating measurement and control apparatus in series production, all-purpose machines for rectifying and sharpening, etc.

In addition to the tasks in the program for self-equipment with machines in the CIMF's system, the Bucharest Precision Machinery Enterprise, the Brasov Enterprise for Machine Tools and Tools, the Focsani Enterprise for Hydraulic Tools and Equipment, the Bucharest Enterprise for Testing Devices and Equipment, the Vaslui Enterprise for Measurement and Control Devices, the Risnov Tools Enterprise, the Bucharest Steaua Rosie Enterprise, the Bistrita Machine Enterprise, as well as the Scientific Research and Technological Engineering Center for Precision Machinery and Tools can make various types of machines, installations and precision machinery equipment as well as control and testing stands at the requests of the various beneficiaries.

The increased technical and productive potential of the enterprises under the CIMF led to diversification of production and entry into some new fields of precision machinery, permitting development of trade and industrial and technical cooperation with firms and organizations in more than 40 countries on all continents. At present over 20 percent of the entire specific output of precision machinery is exported. The assortment of products supplied for export includes new types of hydraulic and pneumatic equipment, apparatus and equipment for testing, industrial, mechanical and electronic horology, etc.

In order to participate more and more effectively in the general effort to promote technical progress, the CIMF keeps taking steps to improve the product quality and the labor productivity of its own enterprises and of the beneficiaries of its products in order to enhance the overall economic effectiveness in keeping with the demands of the technical-scientific revolution and to fully assert the latter in all social and economic activities.

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FEDERAL GOVERNMENT COMMENTS ON SERBIAN DEVELOPMENT LAG

AU051820 Belgrade Domestic Service in Serbo-Croatian 1300 GMT 5 Jul 84

[Text] The Federal Executive Council [FEC] submitted to the SFRY Assembly today materials entitled, "The Basic Results, Tendencies, and Problems of Development of the Territory of the Socialist Republic of Serbia Outside the Territories of the Autonomous Provinces." Along with these materials, the FEC also submitted a letter which contains assessments of the said materials prepared by the Federal Institute for Social Planning. Bozidar Veljkovic, our assembly correspondent, reports in more detail:

The FEC letter says, among other things, that the pace of development, especially in enhancing the material basis of work and the changes in the structure of the economy and the population, has not enabled the SR of Serbia outside the territories of the provinces to successfully keep pace with the development of the country. This also affects an efficient solving of the inherited unfavorable structural problems in all the fields of social life and work. It has led to a gradual continued slowing down in the development of this republic as compared with the average for the country.

In the level of its economic development and its development characteristics, this republic is, therefore, a Yugoslav region which is less developed than the average for the country. The basic difficulties in the development of this part of Serbia are increasing because several large projects are under construction in energy, mining, metallurgy, the agricultural and food complex, and transportation. Large investment sums are needed for completing these projects. It is planned that the projects will be completed by the end of the decade, and they are a precondition for a quicker development of the economy and for the necessary structural changes.

The concentration of investment funds on the completion of these projects will result in a lower efficiency in the utilization of production funds and in a reduction of the possibility of a quicker growth of production, employment, income, and accumulation. All this, it is said in the FEC letter on the materials: "The Basic Results, Tendencies, and Problems of Development of the Territory of the SFR of Serbia Outside the Territories of the Autonomous Provinces," makes it more difficult to solve the problem of unemployment. The fact that about 30 percent of all unemployed in Yugoslavia are in the territory of Serbia outside the autonomous provinces indicates the overall seriousness of this economic, social, and political problem. It is even more delicate because of the process of reducing the agricultural population of this part of Serbia.

The seriousness of the development of the territory of Serbia outside the autonomous provinces demands that these problems be encompassed in an appropriate way by the new medium-term and long-term plans. This also agrees with the positions in the long-term program of economic stabilization. These plans must be based on the foundations of the association of labor and pooling of resources, a maximum reliance on one's own forces, the agreed joint policy of development, and the economic policy of common interest, the FEC letter says.

It is expected that the materials, "The Basic Results, Tendencies, and problems of Development of the Territory of Serbia Outside the Territories of the Autonomous Provinces," will begin to be discussed in the working bodies of the SFRY Assembly.

CSO: 2800/391 END